

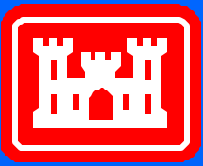
U.S. Army Corps
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Wilmington District

Philpott Lake, Virginia (Section 216) Feasibility Study



Meeting Of Stakeholders, Executive Committee, Planning Team
Martinsville, Virginia
March 7, 2007





**U.S. Army Corps
of Engineers
Wilmington District**

Philpott Lake, Virginia (Section 216) Study Project Purposes

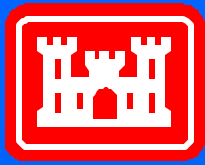
Specifically Authorized Project Purposes

- Flood Damage Reduction
- Hydropower

Other Project Purpose

- Recreation
- Water Supply
- Fish and Wildlife
- Low Flow Releases





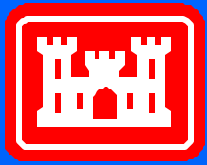
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Philpott Lake, Virginia (Section 216) Study

What is a Section 216 Study?

Public Law (PL) 91-611 River and Harbor and Flood Control Act of 1970

“The Secretary of the Army, acting through the Chief of Engineers, is authorized to review the operation of projects the construction of which has been completed and which were constructed by the Corps of Engineers in the interest of navigation, flood control (flood damage reduction), water supply, and related purposes, when found advisable due to significantly changed physical or economic conditions, and to report, thereon to Congress with recommendations on the advisability of modifying the structures or their operations, and for improving the environment in the overall public interest.”

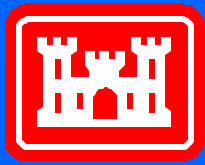


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Philpott Lake, Virginia (Section 216) Study What Guides the Philpott 216 Study?

What have we done so far?

Reconnaissance Phase

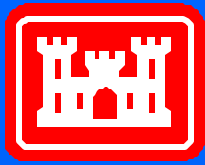


Philpott Lake, Virginia (Section 216) Reconnaissance Study

Initial Public Scoping Letter December 8, 2003

U.S. Army Corps
of Engineers
Wilmington District

- Sent Scoping letter to 214 individuals, organizations and agencies
- 28 letters of comment were received
- 145 comments were identified
- Comments placed into 18 pre-determined categories
- These 18 Categories were combined to form 5 Study Focus Areas
 - ✓ Shoreline Management and Erosion
 - ✓ Natural and Recreation Resources
 - ✓ Operating Policies and Administrative Procedures
 - ✓ Water Quality
 - ✓ Water Supply
 - ✓ Aesthetics



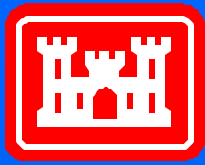
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Wilmington District

Philpott Lake, Virginia (Section 216) 905(b) Reconnaissance Report

Approval of participation in this feasibility study by the US Army Corps of Engineers, Wilmington District, was based on the report entitled:

905(b) Reconnaissance Report, Philpott Dam and Lake, Virginia, (Section 216) Study, Smith River

- ✓ Dated August 2004
- ✓ Approved 7 January 2005.



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Wilmington District**

Philpott Lake, Virginia (Section 216) Feasibility Study

What is a Cost Shared Feasibility Study?

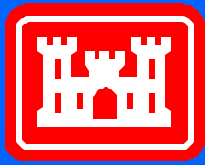
Who is the Cost Sharing Partner?

Section 105 of the Water Resources Development Act of 1986 (Public Law 99-662) requires that feasibility studies undertaken by the U.S. Army Corps of Engineer be cost shared with a non-Federal Sponsor. The cost share percentage for this study is 50% federal and 50% non-Federal. The cost sharing partners for this study are:

Commonwealth of Virginia

U.S Army Corps of Engineers
Wilmington District





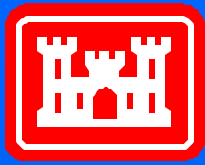
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Wilmington District**

Philpott Lake, Virginia (Section 216) Feasibility Cost Sharing Agreement

USACE – Wilmington prepared a Project Management Plan (PMP) and Feasibility Cost Sharing Agreement (FCSA) which were coordinated with the Commonwealth of Virginia.

- ✓ FCSA executed Sep 2006
- ✓ Feasibility Phase Initiated October 2006





**U.S. Army Corps
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Wilmington District**

Philpott Lake, Virginia (Section 216) Feasibility Study Feasibility Cost Sharing Agreement Requirements for an Executive Committee

To provide consistent and effective communication, the Sponsor and the Government shall appoint senior representatives to an Executive Committee. Thereafter the Executive Committee shall meet regularly until the end of the Study Period.

Until the end of the Study Period, the Executive Committee shall generally oversee the Study consistently with the PMP.

Executive Committee Members

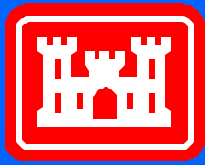
Commonwealth of Virginia

Jeff Corbin
Assistant Secretary
Office of the Secretary of
Natural Resources



U.S. Army Corps of Engineers

Christine M. Brayman
Deputy District Engineer for
Programs and Project
Management



U.S. Army Corps
of Engineers
Wilmington District

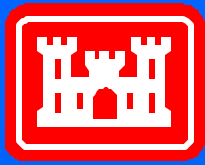
Philpott Lake, Virginia (Section 216) Study

What Guides the Philpott 216 Study?

Project Management Plan November 2006

A Project Management Plan (PMP) guides conduct of this study. The PMP is a changing document, updated as the study progresses.

- | | |
|---|----------|
| ✓ Draft PMP Completed | Jul 2005 |
| ✓ PMP Coordinated With Sponsor | Oct 2006 |
| ✓ PMP Approved By Sponsor/USACE and Finalized | Nov 2006 |
| ✓ Stakeholders Provided Copy of PMP | Feb 2007 |



**U.S. Army Corps
of Engineers
Wilmington District**

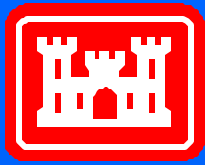
Philpott Lake, Virginia (Section 216) Feasibility Study Day to Day Study Management and Oversight

Lead Planner	Richard Lewis	USACE
Project Manager	Ben Lane	USACE
Project Manager/ Planner	Bud Laroche	VADGIF

**U.S Army Corps of Engineers
Wilmington District**

**Commonwealth of Virginia
Department of Game and Inland Fisheries**





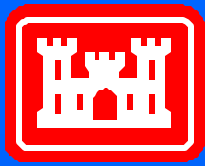
Philpott Lake, Virginia (Section 216) Feasibility Study

Characteristics of this Section 216 Study

U.S. Army Corps
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Wilmington District

- ✓ Comprehensive watershed approach. Benefits from and impacts on all resources will be considered. Focus on operation of and flow releases from the completed Philpott Lake project.
- ✓ Will consider problems and opportunities which can be addressed by making changes to project structures or operations.
- ✓ Address the concerns of the study sponsor, resource agencies, and all of the stakeholders.
- ✓ Not a basin study. Focus on and limited to problems and opportunities in connection with the operation of and flow releases from the completed Philpott Lake project. Will not consider all water resource problems and opportunities throughout the river basin.





U.S. Army Corps
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Wilmington District

Philpott Lake, Virginia (Section 216) Feasibility Study

Cost Share Partners' Critical Decision Points for the Three Stage Study Approach

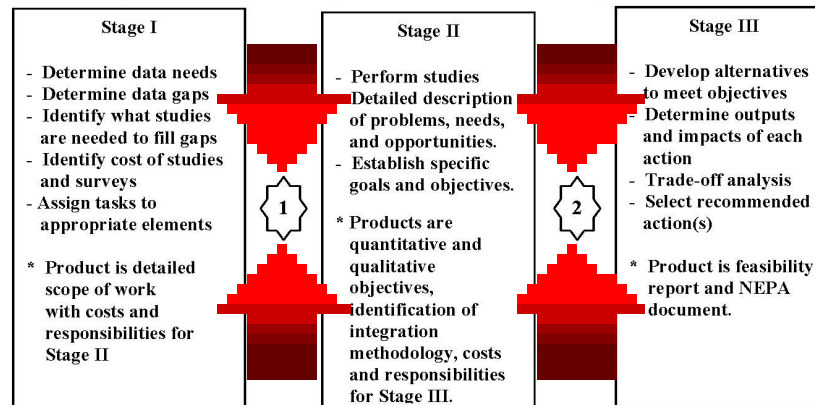
ATTACHMENT 4

THREE STAGE STUDY APPROACH

Corps Requirements: PMP and FCSEA must identify full cost of feasibility study
FCSEA must identify allocation of costs for each partner

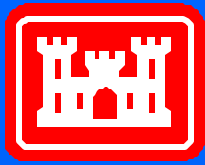
Sponsor Requirements: PMP should be structured to be useful to project sponsor and beneficiaries.
PMP should identify stakeholder contributions
PMP should address tasks, methods, costs, and responsible parties

Actions: Project Management Plan will be structured to identify a 3-Stage approach, identify Subject Matter Specialists for Stage I activities, and costs for each project Stage. The three Stages are described in the following table.



- 1** Decision Point 1 – what studies, surveys, etc. will be conducted in Stage II and how will the costs be allocated.
- 2** Decision Point 2 – what objectives will be addressed in Stage III and how will costs be allocated.





Philpott Lake, Virginia (Section 216) Feasibility Study

Stage I Study Outputs

U.S. Army Corps
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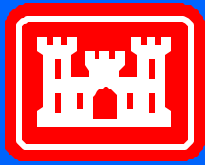
Purpose of Stage I

- Determine Data Requirements for Study
 - ✓ Determine data gaps
 - ✓ Identify what studies are needed to fill gaps
 - ✓ Identify cost of studies and surveys
 - ✓ Assign tasks to appropriate elements

Products of Stage I

- Detailed scope of work for Stage II effort
- Estimated costs for Stage II effort
- Recommended Method of Accomplishment for Stage II effort





Philpott Lake, Virginia (Section 216) Feasibility Study

Stage II Outputs

U.S. Army Corps
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Wilmington District

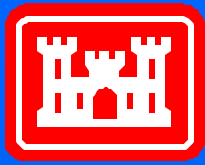
Purpose of Stage II

- Perform required studies
- Establish specific goals and objectives

Products of Stage II

- Quantitative and qualitative objectives for Stage III Effort
- Identification of integration methodology for Stage III Effort
- Estimate costs for Stage III effort
- Establish responsibilities for Stage III.





Philpott Lake, Virginia (Section 216) Feasibility Study

Stage III Outputs

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Wilmington District

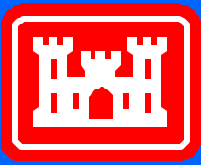
Purpose of Stage III

- Develop alternatives that meet objectives
- Determine outputs and impacts of each action
- Trade-off analysis
- Select recommended action(s)

Products of Stage III

- Product is feasibility report and NEPA document.



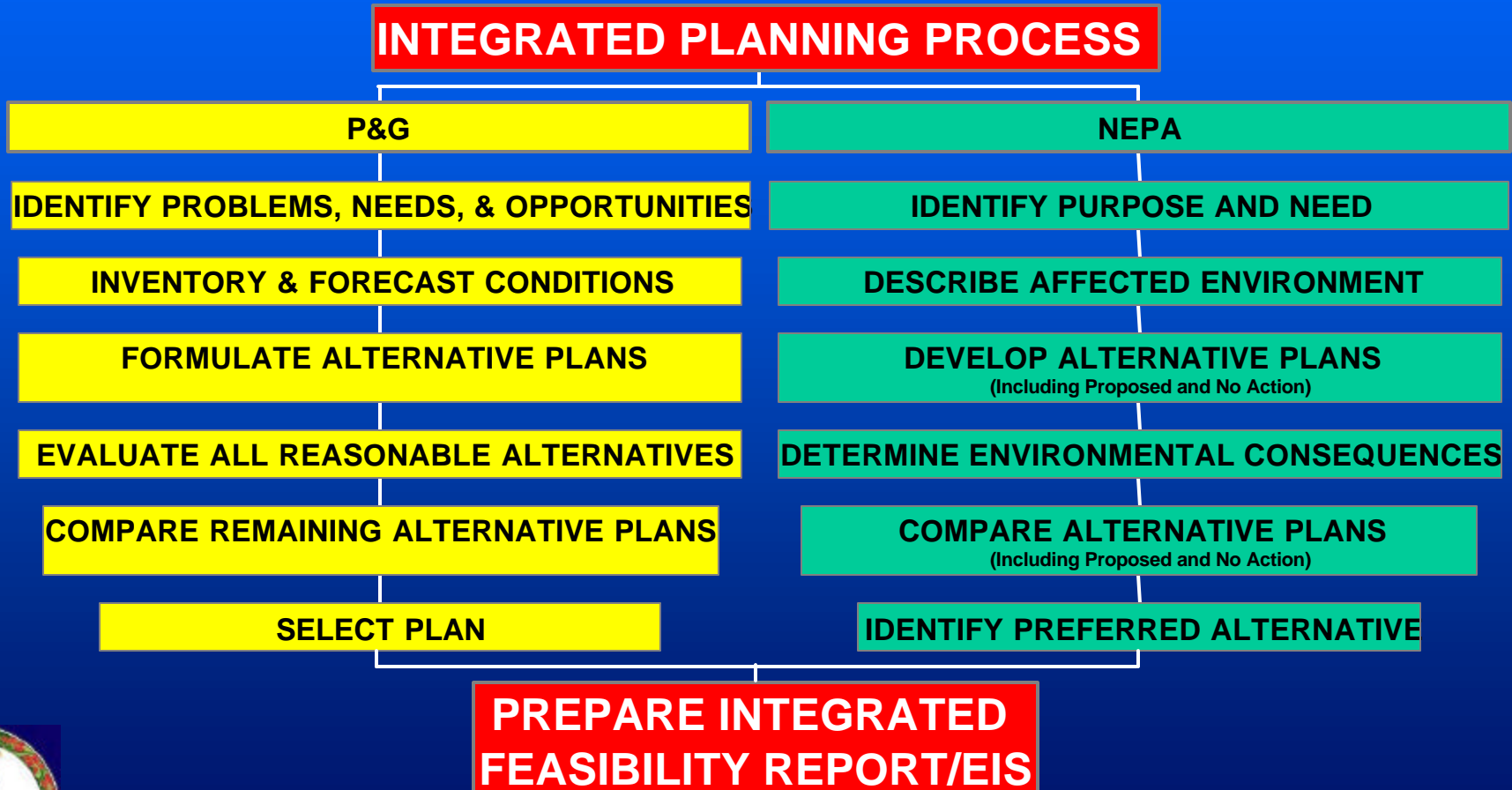


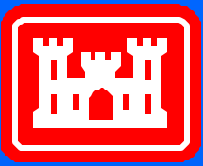
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Wilmington District**

Philpott Lake, Virginia (Section 216) Feasibility Study

Phase III Study Flow Chart

Integrated Principles and Guidelines (P&G) & National Environmental Policy Act (NEPA) Planning Process





**U.S. Army Corps
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Wilmington District**

Philpott Lake, Virginia (Section 216) Study Project Purposes

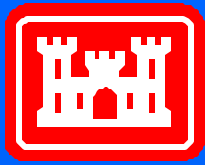
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- Water Supply
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- Low Flow Releases



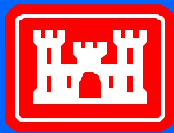


Philpott Lake, Virginia (Section 216) Feasibility Study Study Schedule

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Wilmington District

<u>Task</u>	<u>Estimated Schedule</u>	<u>Status</u>
Complete reconnaissance report 905(b)	Sep 2004	Complete
Complete reconnaissance phase – FCSA executed	Sep 2006	Complete
Begin phase I of feasibility phase	Oct 2006	Complete
Project Management Plan (PMP) completed	Nov 2006	Complete
Technical work groups formed/Team leaders assigned	Mar 2007	Complete
Complete phase I-Work groups complete scopes of work	Feb 2008	
Complete phase II-Data collection, studies, modeling	Feb 2009	
Select recommended plan	Dec 2009	
Complete draft feasibility report and NEPA documents	Jun 2010	
Complete NEPA coordination and processing	Oct 2010	
Complete final feasibility report and submit to Division	Dec 2010	
Feasibility report approved by Division	Jan 2011	
Washington level comments, reviews and approval		
Report Recommendations Submitted to Congress		





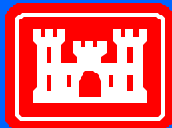
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Philpott Lake, VA (Section 216) Reconnaissance Study

Reconnaissance phase cost \$138,000 – all Federal cost

Recon phase completed and FCSEA executed September 2006



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Wilmington District

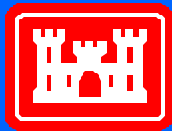


Philpott Lake, VA (Section 216)

Budget and Appropriations

	<u>Federal Budget</u>	<u>Congressional Appropriations</u>
• FY 2003	0	\$ 17,000
• FY 2004	0	67,000
• FY 2005	0	40,000
• FY 2006	0	99,000
• FY 2007	<u>0</u>	<u>115,000</u>
TOTAL	0	\$ 338,000

- Study never in the Federal budget. Funded to date by Congressional adds.
- The feasibility phase started in October 2006.



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Philpott Lake, VA (Section 216) Feasibility Study Cost Estimate

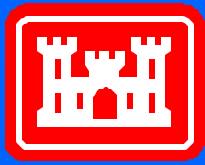
- The feasibility phase started in October 2006

	<u>Estimated Cost</u>	<u>Federal</u>	<u>Nonfederal</u>
• Phase 1	\$ 400,000	200,000	200,000
• Phase 2	1,000,000	500,000	500,000
• Phase 3	750,000	375,000	375,000
• Contingency	<u>350,000</u>	<u>175,000</u>	<u>175,000</u>
• TOTAL	\$ 2,500,000	\$1,250,000	\$1,250,000

- ❖ Sponsor's share can be cash or work-in-kind credit.
- ❖ Federal and nonfederal cost share of \$300,000 to \$400,000 each per year for several years is required to complete the study.

Philpott Lake





**U.S. Army Corps
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Wilmington District**

Philpott Lake, Virginia (Section 216) Feasibility Study

Team Status

Team Status

7 March 2007

Natural and Recreation Resources

Basic* Team In Place

Operating Policies and Administrative Procedures

Combined with John H. Kerr

Water Quality

Need to Establish Team

Water Supply

Need to Establish Team

Aesthetics

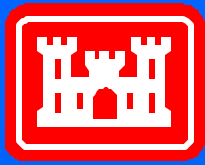
Deferred Until Stage III

Shoreline Management and Erosion

Deferred Until Stage III

* Additional stakeholders interested in this area of study are welcomed





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Wilmington District**

Philpott Lake, Virginia (Section 216) Feasibility Study Work Group Selection Process

- ✓ **Describe the Work Group's Function**
- ✓ **Describe the Desired Skills Necessary for Work Group Participation**
- ✓ **Solicit Volunteers**
- ✓ **Cost Share Partners Recommend Members for Work Groups**
- ✓ **Submit Proposed Work Groups to Executive Committee for Approval**
- ✓ **Work Groups Begin Consideration of Tasks Outlined in the PMP**



Philpott Lake



Philpott 216 - A Collaborative Effort



- **Public, Agency & Regional Involvement**
 - Public Involvement is a Required Element of the Philpott 216
 - Multiple Interests, Opportunities, and Needs
 - Coordination with Federal, State and Local Partners and Interests
 - Multi-step Process
 - Need for Innovation - Project Web Site etc.
- **Independent Technical Review and External Peer Review Teams**

1st Task – Agency/Partner
Coordination

- *Develop Project Principles*
- *Generate Options*

2nd Task – Agency/Partner
Coordination

- *Review Public Input*
- *Provide Preferred Options*

Planning Team

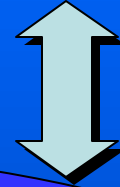
- *Refine Input*
- *Develop Alternative Measures*
- *Assess Feasibility*

1st Task - Public Involvement

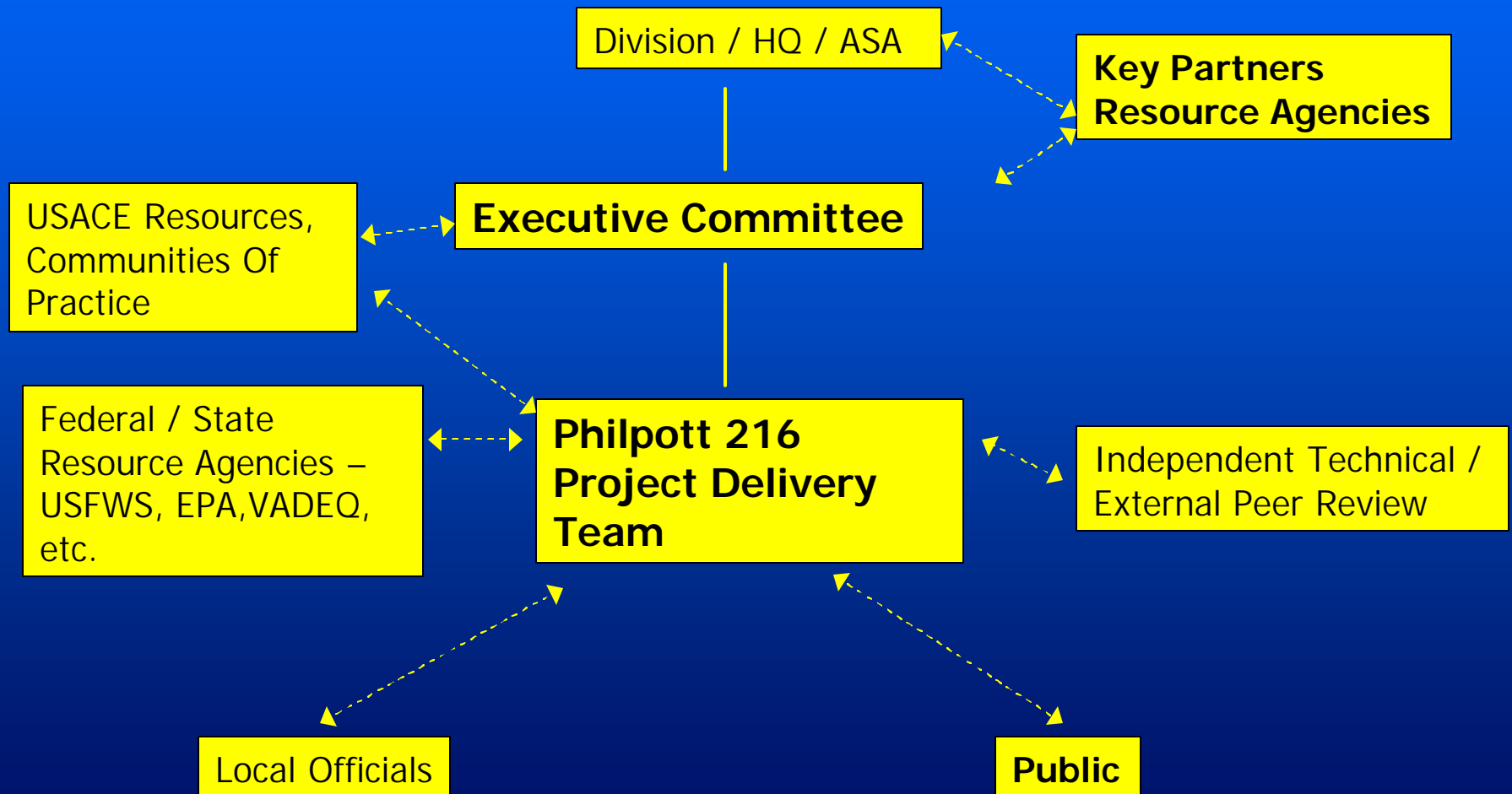
- *React to Options and Principles*
- *Generate New Options*

2nd Task - Public Involvement

- *Gather Additional Public Comment*



Organizational Structure



Philpott 216 – Water Quality

- **Downstream of Dam**
- **Within Reservoir**



- **Review Existing WQ Data**
- **Determine WQ Goals and Objectives**
- **Evaluate Applications of WQ Models**
- **Prepare SOW for Additional WQ Data If Needed**
- **Evaluate WQ Effects of Management Option Scenarios**

Study Participant List

If you would like to be on the Philpott Study Participant List
Please provide your name, address, telephone number,
and e-mail to:

Contact: Richard H. Lewis
Plan Formulation & Economics Section
Address: U.S. Army Corps of Engineers
Wilmington District
Post Office Box 1890
Wilmington, North Carolina 28402-1890
Telephone: (910) 251-4755
FAX: (910) 251-4744
E-Mail: richard.h.lewis@saw02.usace.army.mil

Philpott (Section 216) Feasibility Study Web Page

http://www.saw.usace.army.mil/philpott_216/main.htm

Philpott Lake

